





Created: 3 weeks, 6 days after earthquake

**PAGER** 

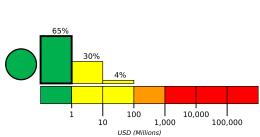
Version 3

# **M 5.6, 14 km WSW of Tingloy, Philippines** Origin Time: 2020-10-04 18:16:53 UTC (Mon 02:16:53 local) Location: 13.6091° N 120.7488° E Depth: 121.0 km

**Estimated Fatalities** 10,000 1,000

and economic losses. There is a low likelihood of casualties and damage.

Green alert for shaking-related fatalities Estimated Economic Losses



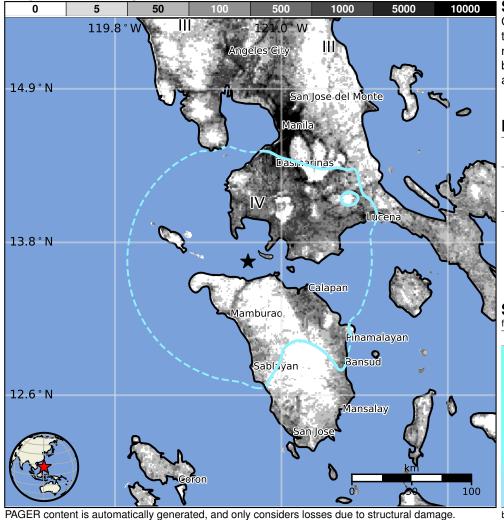
**Estimated Population Exposed to Earthquake Shaking** 

ESTIMATED POPULATION EXPOSURE (k=x1000)		_*	28,580k*	12,030k	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	11-111	IV	V	VI	VII	VIII	IX	X+
PERCEIVE	SHAKING	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

<sup>\*</sup>Estimated exposure only includes population within the map area.

### Population Exposure

population per 1 sq. km from Landscan



### **Structures**

Overall, the population in this region resides in structures that are a mix of vulnerable and earthquake resistant construction. The predominant vulnerable building types are unknown/miscellaneous types and heavy wood frame construction.

#### **Historical Earthquakes**

Date	Dist.	Mag.	Max	Shaking
(UTC)	(km)		MMI(#)	Deaths
1977-03-18	385	7.2	VII(520k)	1
1999-12-11	261	7.2	VIII(17k)	1
1990-07-16	239	7.7	IX(893k)	2k

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

## **Selected City Exposure**

from GeoNames.org

MMI	City	Population
IV	Lumil	3k
IV	Calaca	37k
IV	Malabag	7k
IV	Tranca	2k
IV	Calantas	3k
IV	Balite Segundo	7k
IV	Calapan	66k
IV	Calamba	317k
Ш	San Fernando	251k
Ш	Manila	1,600k
Ш	Quezon City	2,762k

bold cities appear on map.

(k = x1000)

Limitations of input data, shaking estimates, and loss models may add uncertainty. https://earthquake.usgs.gov/earthquakes/eventpage/us6000c5i4#pager

Event ID: us6000c5i4